

ABSTRACT OF THE DISCLOSURE

The signal received comprises contributions from several channels multiplexed by respective spreading codes. After having estimated response parameters of the channels, soft estimates of the symbols transmitted are calculated. These symbols are then apportioned between a first set of symbols satisfying a confidence criterion applied to the calculated soft estimates and a second set of symbols not satisfying this criterion. A modified signal is determined by subtracting estimated contributions corresponding to the symbols of the first set from the signal received. New soft estimates of the symbols of the second set only are calculated, as a function of the modified signal and of the estimated response parameters, and this may be done with a detection algorithm of more complex nature, in particular a multi-user algorithm, by virtue of the size reduction performed by restricting oneself to the symbols of the second set.